

AD-A100 061

TEXAS UNIV AT AUSTIN APPLIED RESEARCH LABS
SONAR TEST AND TEST INSTRUMENTATION SUPPORT. (U)
OCT 80 D D BAKER, B O MOSES, J L SHOREY

F/G 17/1

N00140-76-C-6487

UNCLASSIFIED

NL

END
DATE
FILED
7 8
DTIC

ADA100061



Approved for:

REDACTED
REDACTED
REDACTED

Approved for public release; distribution unlimited.

81611082

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
		AD-A100 061
4. TITLE (and Subtitle)	5. TYPE OF REPORT & PERIOD COVERED quarterly progress report 1 March - 31 May 1980	
SONAR TEST AND TEST INSTRUMENTATION SUPPORT		6. PERFORMING ORG. REPORT NUMBER QPR No. 16
7. AUTHOR(s)	8. CONTRACT OR GRANT NUMBER(s) N00140-76-C-6487	
Dudley D. Baker Bruce O. Moses James L. Shorey		
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
Applied Research Laboratories The University of Texas at Austin Austin, Texas 78712		
11. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE 1 October 1980	
New London Laboratory Naval Underwater Systems Center New London, CT 06320		13. NUMBER OF PAGES 9
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	15. SECURITY CLASS. (of this report) UNCLASSIFIED	
		15a. DECLASSIFICATION DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. SPECIAL PURPOSE PASSIVE SONAR SYSTEMS SUPPORT	3
III. SONAR INSTRUMENTATION AND EVALUATION	5
A. AN/GQM-2 Transducer Test Set	5
B. AN/SQM-()	5
IV. AN/WQM-5() PROGRAM	7

I. INTRODUCTION

Applied Research Laboratories, The University of Texas at Austin (ARL:UT), was awarded Contract N00140-76-C-6487, sponsored by New London Laboratory, Naval Underwater Systems Center (NLONLAB NUSC), effective 1 June 1976. Some of the work under this contract represents a follow-on effort to previous work sponsored by NLONLAB NUSC under Contract N00140-74-C-6316.

The work under Contract N00140-76-C-6487 was originally divided into six task areas that focused on technical support in areas of sonar technology.

- I. AN/FQM-10(V) Sonar Test Set Field Support
- II. Transducer Repair Facility Test Site Field Support
- III. AN/WQM-5 Sonar Test Set Field Support
- IV. Special Purpose Passive Sonar Systems Support
- V. Sonar Instrumentation Test and Evaluation
- VI. Study of Towed Line Array Acoustical Testing at Transducer Repair Facilities

Additional tasks were added by contract modifications, as follows.

- VII. AN/SQM-() Sonar Noise Measuring Set Development (Mod P00019)
- VIII. AN/WQM-5() Sonar Test Set Development (P00019)
- IX. Sonar Dome Maintenance Documentation Support (P00019)
- X. AN/BQQ-5 Power Supply Development (P00019) (follow-on work under Contracts N00024-77-C-6035 and similar effort under N00123-79-C-0459)
- XI. AN/BQQ-6 Test Instrumentation (P00035)
- XII. AN/WLR-12 Calibration (P00033)

This report is Quarterly Progress Report No. 16 under Contract N00140-76-C-6487, for the period 1 March - 31 May 1980.

II. SPECIAL PURPOSE PASSIVE SONAR SYSTEMS SUPPORT

No effort was expended on this task during the report period.

III. SONAR INSTRUMENTATION AND EVALUATION

A. AN/GQM-2 Transducer Test Set

During this quarter, the following updated documentation and software for the AN/GQM-2 Transducer Test Set were forwarded to the appropriate facilities:

1. User Calibration Procedure, AN/GQM-2 Transducer Test Set, TL-EA-80-3, 22 February 1980,
2. AN/GQM-2 Operate Overlay, and
3. AN/GQM-2 Operate Tape, Version 02 (5/1/80).

B. AN/SQM-()

No work was performed on the AN/SQM-() Sonar Noise Measuring Set during this report period. However, work on this project will begin again shortly.

IV. AN/WQM-5() PROGRAM

A. Field Change Program

During this report period, ARL:UT delivered one AN/WQM-5, Ser A11, to COMPACAREA COGARD. Thus far, a total of 17 modified sets have been delivered.

B. Field Support Services

During this report period, ARL:UT provided the following field support services:

1. returned a repaired plotter (HP 9872A) to MOTU 5, San Diego, CA;
2. provided NAVSHIPYD PHILA with a sensor calibration and readout monitor while its units were being repaired;
3. repaired and returned a sensor calibration and readout monitor to NAVSHIPYD PHILA;
4. provided NAVSHIPYD PHILA with a spare SCR control PCB 8A8 to repair a defective power supply;
5. provided MOTU 12, Mayport, FL, with a spare SCR control 8A8 card to repair a defective unit.

1 October 1980

DISTRIBUTION LIST FOR
QUARTERLY PROGRESS REPORT NO. 16
UNDER CONTRACT N00140-76-C-6487
1 March - 31 May 1980

Copy No.

- 1 - 3 Receiving Officer
New London Laboratory
Naval Underwater Systems Center
Building 43
New London, CT 06320
Attn: Code NA401
- 4 Office of Naval Research
Resident Representative
Room 582, Federal Building
Austin, TX 78701
- 5 Electroacoustics Group, ARL:UT
- 6 G. Earle English, ARL:UT
- 7 James L. Shorey, ARL:UT
- 8 Library, ARL:UT

SEARCHING FILE BLANK-NOT FILLED